1. A method of switching between physical interfaces on a device, the method comprising:

switching from a first physical interface on the device to a second physical interface on the device based on information in an interface redundancy group;

wherein the information in the interface redundancy group identifies the first physical interface as a primary interface for the device and the second physical interface as a secondary interface for the device.

2. The method of claim 1, wherein the interface redundancy group includes information defining the primary interface for the device and one or more secondary interfaces for the device.

3. The method of claim 1, further comprising detecting an event at the first physical interface;

wherein switching is performed in response to the event.

4. The method of claim 3, wherein the event comprises a failure of the first physical interface.

5. The method of claim 4, wherein the first physical interface is associated with a driver and a signaling stack, and the failure of the first physical interface comprises a failure of the driver and/or the signaling stack.

6. The method of claim 5, further comprising monitoring the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

7. The method of claim 3, wherein the event comprises receipt of a slot failure at the first physical interface.

8. The method of claim 1, wherein, prior to switching, the second physical interface operates in a passive mode during which the second physical interface is dormant.

9. The method of claim 1, wherein, prior to switching, the second physical interface operates in an active mode during which the second physical interface is communicating over a network.

10. The method of claim 1, wherein the first physical interface supports one or more network layer interfaces.

11. The method of claim 10, wherein, following switching, the second physical interface supports the one or more network layer interfaces formerly supported by the first physical interface.

12. The method of claim 1, wherein the first and second physical interfaces comprise asynchronous transfer mode (ATM) physical interfaces.

13. The method according to claim 1, wherein the first and second physical interfaces are resident on a ~~single network router.~~

14. The method of claim 1, wherein, following switching, the second physical interface assumes responsibilities of the first physical interface.

15. The method of claim 14, wherein the responsibilities include routing and/or bridging functions.

16. The method of claim 1, wherein, following switching, the second physical interface is configured in a same manner as the first physical interface was configured prior to switching.

17. The method of claim 1, wherein the device includes a third physical interface, and the interface redundancy group identifies the third physical interface as a tertiary interface; and

further comprising switching from the second physical interface to the third physical interface in response to an event.

18. The method of claim 17, wherein, following switching, the third physical interface assumes responsibilities of the first and second physical interfaces.

19. The method of claim 18, wherein the responsibilities include routing and/or bridging functions.

20. A method of switching between physical interfaces on a single device, the method comprising:

designating a physical interface on the device as a high priority physical interface;

determining if the high priority physical interface is available; and

switching from a lower priority physical interface on the device to the high priority physical interface when the high priority physical interface is available.

21. The method of claim 20, wherein switching is performed automatically in response to the high priority interface being available.

22. The method of claim 20, wherein determining comprises monitoring the high priority physical interface to determine if the high priority physical interface is available.

23. A method of switching between asynchronous transfer mode (ATM) physical interfaces on a device, the method comprising:

switching from a first ATM physical interface on the device to a second ATM physical interface on the device based on information in an interface redundancy group; and

establishing ATM network layer interfaces over the second ATM physical interface that correspond to ATM network layer interfaces that were established over the first ATM physical interface prior to switching;

wherein the information in the interface redundancy group identifies the first ATM physical interface as a primary interface for the device and the second ATM physical interface as a secondary interface for the device.

24. The method of claim 23, wherein the interface redundancy group includes information defining the primary interface for the device and one or more secondary interfaces for the device.

25. The method of claim 23, further comprising detecting an event at the first ATM physical interface;

wherein switching is performed in response to the event.

26. The method of claim 25, wherein the event comprises a failure of the first ATM physical interface.

27. The method of claim 26, wherein the first ATM physical interface is associated with a driver and a signaling stack, and the failure of the first ATM physical interface comprises a failure of the driver and/or the signaling stack.

28. The method of claim 27, further comprising monitoring the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

29. The method of claim 25, wherein the event comprises receipt of a slot failure at the first ATM physical interface.

30. The method of claim 23, wherein, prior to switching, the second ATM physical interface operates in a passive mode during which the second ATM physical interface ~~is dormant~~.

31. The method of claim 23, wherein, prior to switching, the second ATM physical interface operates in an active mode during which the second ATM physical interface is communicating over a network.

32. A computer program stored on a computer-readable medium for switching between physical interfaces on a device, the computer program comprising instructions that cause a computer to:

switch from a first physical interface on the device to a second physical interface on the device based on information in an interface redundancy group;

wherein the information in the interface redundancy group identifies the first physical interface as a primary interface for the device and the second physical interface as a secondary interface for the device.

33. The computer program of claim 32, wherein the interface redundancy group includes information defining the primary interface for the device and one or more secondary interfaces for the device.

34. The computer program of claim 32, further comprising instructions that cause the computer to detect an event at the first physical interface;

wherein switching is performed in response to the event.

35. The computer program of claim 34, wherein the event comprises a failure of the first physical interface.

36. The computer program of claim 35, wherein the first physical interface is associated with a driver and a

signaling stack, and the failure of the first physical interface comprises a failure of the driver and/or the signaling stack.

37. The computer program of claim 36, further comprising instructions to cause the computer to monitor the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

38. The computer program of claim 34, wherein the event comprises receipt of a slot failure at the first physical interface.

39. The computer program of claim 32, wherein, prior to switching, the second physical interface operates in a passive mode during which the second physical interface is dormant.

40. The computer program of claim 32, wherein, prior to switching, the second physical interface operates in an active mode during which the second physical interface is communicating over a network.

41. The computer program of claim 32, wherein the first physical interface supports one or more network layer interfaces.

42. The computer program of claim 41, wherein, following switching, the second physical interface supports the one or more network layer interfaces formerly supported by the first physical interface.

43. The computer program of claim 32, wherein the first and second physical interfaces comprise asynchronous transfer mode (ATM) physical interfaces.

44. The computer program according to claim 32, wherein the first and second physical interfaces are resident on a single network router.

45. The computer program of claim 32, wherein, following switching, the second physical interface assumes responsibilities of the first physical interface.

46. The computer program of claim 45, wherein the responsibilities include routing and/or bridging functions.

47. The computer program of claim 32, wherein, following switching, the second physical interface is configured in a same manner as the first physical interface was configured prior to switching.

48. The computer program of claim 32, wherein the device includes a third physical interface, and the interface redundancy group identifies the third physical interface as a tertiary interface; and

further comprising instructions to cause the computer to switch from the second physical interface to the third physical interface in response to an event.

49. The computer program of claim 48, wherein, following switching, the third physical interface assumes responsibilities of the first and second physical interfaces.

50. The computer program of claim 49, wherein the responsibilities include routing and/or bridging functions.

51. A computer program stored on a computer-readable medium for switching between physical interfaces on a single device, the computer program comprising instructions that cause a computer to:

designate a physical interface on the device as a high priority physical interface;

determine if the high priority physical interface is available; and

switch from a lower priority physical interface on the device to the high priority physical interface when the high priority physical interface is available.

52. The computer program of claim 51, wherein switching is performed automatically in response to the high priority interface being available.

53. The computer program of claim 51, wherein determining comprises monitoring the high priority physical interface to determine if the high priority physical interface is available.

54. A computer program stored on a computer-readable medium for switching between asynchronous transfer mode (ATM) physical interfaces on a device, the computer program comprising instructions that cause a computer to:

switch from a first ATM physical interface on the device to a second ATM physical interface on the device based on information in an interface redundancy group; and

establish ATM network layer interfaces over the second ATM physical interface that correspond to ATM network

layer interfaces that were established over the first ATM physical interface prior to switching;

wherein the information in the interface redundancy group identifies the first ATM physical interface as a primary interface for the device and the second ATM physical interface as a secondary interface for the device.

55. The computer program of claim 54, wherein the interface redundancy group includes information defining the primary interface for the device and one or more secondary interfaces for the device.

56. The computer program of claim 54, further comprising instructions that cause the computer to detect an event at the first ATM physical interface;

wherein switching is performed in response to the event.

57. The computer program of claim 56, wherein the event comprises a failure of the first ATM physical interface.

58. The computer program of claim 57, wherein the first ATM physical interface is associated with a driver and a signaling stack, and the failure of the first ATM physical interface comprises a failure of the driver and/or the signaling stack.

59. The computer program of claim 58, further comprising instructions that cause the computer to monitor the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

60. The computer program of claim 56, wherein the event comprises receipt of a slot failure at the first ATM physical interface.

61. The computer program of claim 54, wherein, prior to switching, the second ATM physical interface operates in a passive mode during which the second ATM physical interface is dormant.

62. The computer program of claim 54, wherein, prior to switching, the second ATM physical interface operates in an active mode during which the second ATM physical interface is communicating over a network.

63. The computer program of claim 54, wherein the device includes a third ATM physical interface, and the interface redundancy group identifies the third ATM physical interface as a tertiary interface; and

further comprising instructions that cause the computer to switch from the second physical interface to the third physical interface in response to an event.

64. An apparatus which switches between physical interfaces, the apparatus comprising:

a first physical interface;

a second physical interface; and

a processor which executes instructions to switch from the first physical interface to the second physical interface based on information in an interface redundancy group;

wherein the information in the interface redundancy group identifies the first physical interface as a primary

interface for the device and the second physical interface as a secondary interface for the device.

65. The apparatus of claim 64, wherein the interface redundancy group includes information defining the primary interface for the apparatus and one or more secondary interfaces for the apparatus.

66. The apparatus of claim 64, wherein:

the processor executes instructions to detect an event at the first physical interface; and

switching is performed in response to the event.

67. The apparatus of claim 66, wherein the event comprises a failure of the first physical interface.

68. The apparatus of claim 67, wherein the first physical interface is associated with a driver and a signaling stack, and the failure of the first physical interface comprises a failure of the driver and/or the signaling stack.

69. The apparatus of claim 68, wherein the processor executes instructions to monitor the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

70. The apparatus of claim 66, wherein the event comprises receipt of a slot failure at the first physical interface.

71. The apparatus of claim 64, wherein, prior to switching, the second physical interface operates in a

passive mode during which the second physical interface is dormant.

72. The apparatus of claim 64, wherein, prior to switching, the second physical interface operates in an active mode during which the second physical interface is communicating over a network.

73. The apparatus of claim 64, wherein the first physical interface supports one or more network layer interfaces.

74. The apparatus of claim 73, wherein, following switching, the second physical interface supports the one or more network layer interfaces formerly supported by the first physical interface.

75. The apparatus of claim 64, wherein the first and second physical interfaces comprise asynchronous transfer mode (ATM) physical interfaces.

76. The apparatus of claim 64, which comprises a ~~single~~ network router.

77. The apparatus of claim 64, wherein, following switching, the second physical interface assumes responsibilities of the first physical interface.

78. The apparatus of claim 77, wherein the responsibilities include routing and/or bridging functions.

79. The apparatus of claim 64, wherein, following switching, the second physical interface is configured in a

same manner as the first physical interface was configured prior to switching.

80. The apparatus of claim 64, wherein:

the apparatus further comprises a third physical interface, and the interface redundancy group identifies the third physical interface as a tertiary interface; and

the processor executes instructions to switch from the second physical interface to the third physical interface in response to an event.

81. The apparatus of claim 80, wherein, following switching, the third physical interface assumes responsibilities of the first and second physical interfaces.

82. The apparatus of claim 81, wherein the responsibilities include routing and/or bridging functions.

83. An apparatus which switches between physical interfaces, the apparatus comprising:

plural physical interfaces; and

a processor which executes instructions to:

designate a physical interface on the apparatus as a high priority physical interface;

determine if the high priority physical interface is available; and

switch from a lower priority physical interface on the apparatus to the high priority physical interface when the high priority physical interface is available.

84. The apparatus of claim 83, wherein switching is performed automatically in response to the high priority interface being available.

85. The apparatus of claim 83, wherein determining comprises monitoring the high priority physical interface to determine if the high priority physical interface is available.

86. An apparatus which switches between asynchronous transfer mode (ATM) physical interfaces, the apparatus comprising:

a first ATM physical interface;

a second ATM physical interface; and

a processor which executes instructions to:

switch from the first ATM physical interface to the second ATM physical interface based on information in an interface redundancy group; and

establish ATM network layer interfaces over the second ATM physical interface that correspond to ATM network layer interfaces that were established over the first ATM physical interface prior to switching;

wherein the information in the interface redundancy group identifies the first ATM physical interface as a primary interface for the device and the second ATM physical interface as a secondary interface for the device.

87. The apparatus of claim 86, wherein the interface redundancy group includes information defining the primary interface for the apparatus and one or more secondary interfaces for the apparatus.

88. The apparatus of claim 86, wherein:

the processor detects an event at the first ATM physical interface; and

switching is performed in response to the event.

89. The apparatus of claim 88, wherein the event comprises a failure of the first ATM physical interface.

90. The apparatus of claim 89, wherein the first ATM physical interface is associated with a driver and a signaling stack, and the failure of the first ATM physical interface comprises a failure of the driver and/or the signaling stack.

91. The apparatus of claim 90, wherein the processor executes instructions to monitor the driver and the signaling stack in order to detect a failure of the driver and/or the signaling stack.

92. The apparatus of claim 88, wherein the event comprises receipt of a slot failure at the first ATM physical interface.

93. The apparatus of claim 86, wherein, prior to switching, the second ATM physical interface operates in a passive mode during which the second ATM physical interface is dormant.

94. The apparatus of claim 86, wherein, prior to switching, the second ATM physical interface operates in an active mode during which the second ATM physical interface ~~is communicating over a network.~~